Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1.   (Currently Amended) An image forming apparatus for digitally reproducing a color image using a screen set consisting of a halftone screen for each color, ~~wherein~~ the screen set comprising:

a first-color halftone ~~screen~~ screen; and

a second-color halftone screen, wherein

two first screen vectors, one in each halftone screen, each screen vector being in a spatial frequency domain defined by a basis vector of a halftone dot pattern of the respective halftone screen, are parallel to each other, and

two second screen vectors, one in each halftone screen, each screen vector being in a spatial frequency domain defined by a basis vector of a halftone dot pattern of the respective halftone screen, are not parallel to each other.

~~in said screen set satisfy a relationship that first vectors, each being either one of two screen vectors in a spatial frequency domain defined by basis vectors in two directions of a halftone dot pattern in the first-color or second-color halftone screen, are parallel to each other, and second vectors, each being the other one of the two screen vectors, are not parallel to each other.~~

2.   (Currently Amended) An image forming apparatus according to claim 1, wherein said first-color halftone screen and said second-color halftone screen further satisfy a relationship that said first screen vectors are equal in magnitude.

3.   (Original) An image forming apparatus according to claim 2, wherein at least one of said first-color and second-color halftone screens is a non-orthogonal screen.

4.   (Currently Amended) An image forming apparatus according to claim 2, the screen set further comprising: wherein

a third-color halftone screen screen; and

a fourth-color halftone screen screen, wherein

wherein two second screen vectors, one in each halftone screen, each screen vector being in a spatial frequency domain defined by a basis vector of a halftone dot pattern of the respective halftone screen, are parallel to each other, and

two first screen vectors, one in each halftone screen, each screen vector being in a spatial frequency domain defined by a basis vector of a halftone dot pattern of the respective halftone screen, are not parallel to each other.

satisfy a relationship that second vectors, each being either one of two screen vectors in a spatial frequency domain defined by basis vectors in two directions of a halftone dot pattern in the third-color or fourth-color halftone screen, are parallel to each other as well as equal in magnitude, and first vectors, each being the other one of the two screen vectors, are not parallel to each other.

5.   (Currently Amended) An image forming apparatus according to claim 4, wherein

said second screen vector of said first-color halftone screen matches either one of secondary spectra, each represented by the sum or the difference of two screen vectors of said fourth-color halftone screen, and

said first screen vector of said third-color halftone screen matches either one of secondary spectra, each represented by the sum or the difference of two screen vectors of said second-color halftone screen.

6.   (Currently Amended) An image forming apparatus according to claim 5, wherein

said first screen vector of said first-color halftone screen, said first screen vector of said third-color halftone screen, and said second screen vector of said second-color halftone screen form a closed triangle, and

said second screen vector of said first-color halftone screen, said first screen vector of said fourth-color halftone screen, and said screen second vector of said third-color halftone screen form a closed triangle.

7.   (Currently Amended) An image forming apparatus according to claim 2, wherein said second screen vector of said first-color halftone screen matches either one of two screen vectors of a third-color halftone screen in said screen set.

8.   (Original) An image forming apparatus according to claim 7, wherein a secondary spectrum represented by the sum or the difference of the two screen vectors of said first-color halftone screen matches either one of two screen vectors of a fourth-color halftone screen in said screen set.

9.   (Original) An image forming apparatus according to claim 2, wherein

said screen set comprises four color halftone screens, and

the four color halftone screens have a relationship that two closed triangles can be formed using two screen vectors of each of the four color halftone screens, without a remainder.

10.   (Original) An image forming apparatus according to claim 2, wherein in a case where directions of halftone dot arrangement match between said first-color and second-color halftone screens, halftone dot intervals in the matched direction of the first-color halftone screen differ from the halftone dot intervals in the matched direction of the second-color halftone screen.

11. (Original) An image forming apparatus according to claim 2, wherein

said screen set comprises four color halftone screens, and

among a total of 8 primary spatial frequency spectra each corresponding to one

of the screen vectors for each color and a total of 8 secondary spatial frequency spectra each

corresponding to the sum or the difference of the screen vectors for the same color, the

number of different spatial frequency spectra contained in a band of from the minimum

frequency to the maximum frequency of said 8 primary spatial frequency spectra is less

than 8.

12. (Original) An image forming apparatus according to claim 11, wherein

said screen set comprises four halftone screens, one for each color, and

among a total of 8 primary spatial frequency spectra, each corresponding to

one of the screen vectors for each color and a total of 8 secondary spatial frequency spectra,

each corresponding to the sum or the difference of the screen vectors for the same color, the

number of different spatial frequency spectra contained in a band of from the minimum

frequency to the maximum frequency of said 8 primary spatial frequency spectra is 6.

13. (Currently Amended) An image forming method for digitally reproducing a

color image, comprising the steps of:

generating halftone images from input color images using a screen set

consisting of multiple color halftone screens, the screen set comprises wherein a first-color

halftone screen and a second-color halftone screen screen,

two first screen vectors, one in each halftone screen, each screen vector being

in a spatial frequency domain defined by a basis vector of a halftone dot pattern of the

respective halftone screen, are parallel to each other, and

two second screen vectors, one in each halftone screen, each screen vector being in a spatial frequency domain defined by a basis vector of a halftone dot pattern of the respective halftone screen, are not parallel to each other.

~~in said screen set satisfy a relationship that first vectors, each being either one of two screen vectors in a spatial frequency domain defined by basis vectors in two directions of a halftone pattern of the first-color or second-color halftone screen, are parallel to each other, and second vectors, each being the other one of the two screen vectors, are not parallel to each other, and~~

reproducing said input color images by combining said halftone images.

14.   (Currently Amended) An image forming method according to claim 13, wherein said first-color halftone screen and said second-color halftone screen further satisfy a relationship that said first screen vectors are equal in magnitude.

15.   (Original) An image forming method according to claim 14, wherein at least one of said first-color and second-color halftone screens is a non-orthogonal screen.

16.   (Canceled)